NOTICE

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The hardware, firmware, or software described in this manual is subject to change without notice.
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FCC NOTICE

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
NOTE: This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment uses, generates, and can radiate radio frequency energy and if not installed in accordance with the operator's manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference in which case the user will be required to correct the interference at his own expense.
WARNING: Changes or modifications made to this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

INDUSTRY CANADA NOTICE

This digital apparatus does not exceed the class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.
Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

VCCI NOTICE

This is a class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

この装置は，情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＡ情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

CLASS A ITE NOTICE

WARNING: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

DECLARATION OF CONFORMITY

Application of Council Directive(s):	**89/336/EEC** **73/23/EEC**
Manufacturer's Name:	**Enterasys Networks, Inc.**
Manufacturer's Address:	**35 Industrial Way** **PO Box 5005** **Rochester, NH 03867**
European Representative Name:	**Mr. Jim Sims**
European Representative Address:	**Enterasys Networks Ltd.** **Nexus House, Newbury Business Park** **London Road, Newbury** **Berkshire RG14 2PZ, England**
Conformance to Directive(s)/ Product Standards:	**EC Directive 89/336/EEC** **EC Directive 73/23/EEC** **EN 55022** **EN 55024** **EN 60950** **EN 60825**
Equipment Type/Environment:	**Networking Equipment, for use in a Commercial or Light Industrial Environment.**

Enterasys Networks, Inc. declares that the equipment packaged with this notice conforms to the above directives.

AGENCY STANDARDS

Safety
Meets the requirements of UL 1950, CSA C22. No. 950, EN 60950, IEC 950, 73/23/EEC, and EN 60825.

Electromagnetic Compatibility
Compliant with the requirements of FCC Part 15, CSA C108.8, EN 55022, EN 61000-3-2, EN 61000-3-3, VCCI V-3, EN 55024, 89/336/EEC, and AS/NZS 3548

Protocols
RFC 2225 Classical IP over ATM (CLIP)

RFCs/MIBs
RFC 1483, Multiprotocol Encapsulation over ATM Adaptation Layer 5; RFC 1595, SONET MIB; RFC 1695, ATM MIB; RFC 2495, DS1 MIB; RFC 2496, DS3 MIB; RFC 2225, Classical IP over ATM

SPECIFICATIONS

The SSR-ATM29-02 is a modular, high-performance OC-3c ATM interface for the X-Pedition 8000 and 8600. The module is optimized to provide an ATM uplink to an ATM backbone, and supports two modular slots, each of which accepts T1/E1, T3/E3 and OC-3c (single mode and multimode fiber, as well as unshielded twisted pair) interface.

Ports
Depending on the APHY used, 1 or 2.

Interface
XP 8000/8600 2-port base module

Physical Dimensions
Size: 27.94 cm H x 19.68 W x 3.94 D (11.00 in. H x 7.75 W x 1.55 D)
Weight: 1.4 kg (3.0 lb.)

Power Consumption
30-35 Watts (depending on which APHY is installed)

Temperature
Operating: 41° to 104°F (5° to 40°C)
Storage: -22° to 164°F (-30° to 73°C)

Humidity
5% to 90% (non-condensing)

LEDs
Table 1 LED Indicators

LED	Condition	Status
Hotswap LEDs (2)	Yellow (Top)	Unit is not functioning, cannot hotswap.
	Green (Bottom)	Unit is operational.
Port 1 Traffic LEDs (2)	Tx Green (Top)	Indicates when the transceiver receives packets.
	Rx Green (Bottom)	Indicates when the transceiver receives flow-control packets.
Port 2 Traffic LEDs (2)	Tx Green (Top)	Indicates when the transceiver transmits packets.
	Rx Green (Bottom)	Indicates when the transceiver transmits flow-control packets.
PHY (Top)	Green	The PHY is operating properly and a link is established.
	Yellow	The PHY is inactive due to media errors.
	Blinking Green	The PHY was disabled by management.
	Off	No connection.
Lightning (Bottom)	Yellow	The diagnostics have detected a fault.
	Blinking Green	The PHY port has been redirected elsewhere.
	Off	Unit is operating properly.

SSR-ATM29-02

The fully integrated design of the X-Pedition family increases the value of the product line by providing a seamless solution to support the industry's most complete range of technology and media options. This scalable framework ensures full cross-platform compatibility and allows for the smoothest possible migration as customers' technology and interface requirements evolve.

The combination of the X-Pedition and the SSR-ATM29-02 OC-3c module provide a complete solution for both the service provider and enterprise markets. Interconnecting IP networks over an ATM backbone is done by many service provider and enterprise customers. The OC-3c module provides the vital link between the network's switch-router solutions and the ATM-based solution in the WAN. Each PVC on the module can be configured as a routed IP interface, and the ATM backbone can provide connectivity from one routed backbone to another.

Options Available
This module operates with the following APHYs (you may purchase them separately from the module) connected to the outside world. For information about these APHYs, consult the Enterasys Networks web site.

XP-APHY-67	XP-APHY-21	XP-APHY-82
XP-APHY-77	XP-APHY-29IR	
XP-APHY-92	XP-APHY-22	

ELECTRICAL HAZARD: The APHY-82 and APHY-92 are designed for intra-building use only. A properly approved CSU must be used for attachment to outside telecommunications lines (T1/E1).

WARNING: The APHY-21, APHY-29, and APHY-29LR use Class 1 Lasers. Do not use optical instruments to view laser output. The use of optical instruments to view laser output increases eye hazard.

INSTALLING THE MODULE

ELECTRICAL HAZARD: Only qualified personnel should perform installation procedures.

Handling the Module

CAUTION: The SSR-ATM29-02 module is easily damaged by electrostatic discharge.

To prevent electrostatic damage, observe the following guidelines:

- Do not remove the module from its packaging until you are ready to install it.
- Do not touch any of the module's pins, connectors or components.
- Hold the module only by its edges or front panel.
- Wear an anti-static wristband connected to a suitable earth ground whenever handling the module.
- Store or transport this module only in appropriate anti-static packaging.

Equipment Checklist

After unpacking the SSR-ATM29-02, check the contents of the box to be sure you received the following items:

- One SSR-ATM29-02 module in static bag
- One disposable anti-static wristband

Tools

This installation requires the following tools:

Anti-static wristband

Phillips screwdriver

Preliminary Setup

Firmware Image Requirements

Version 3.0.0.0 or later.

CLI Setup

Enter the following commands at the CLI before implementing any configurations.

1. **Enable** —> **Configuration** —> **<Enter>**.
2. Once you reach the configuration prompt, you can create the ATM interface using CLI commands as described in the ATM section of the X-Pedition CLI manual. Enter the **?** character to view the options available to you in configuration mode.

Connector Pin Assignments

The connector pins are assigned as follows:

Table 2 APHY-82 and APHY-92 Pin Assignments

Pin	Connection
1	Receive analog signal
2	Receive reference
3	Pin used for shield reference if you use a shielded cable
4	Transmit analog positive pulse
5	Transmit analog negative pulse
6	Pin used for shield reference if you use a shielded cable

Hotswap

You may install this module into a live system without powering off the device. An active module can be removed from a live system only under the following conditions:

- Press the hotswap button. The **green** LED should turn **off** and the **yellow** LED should turn **on**. When the **yellow** LED is **on**, you can safely hotswap the module.

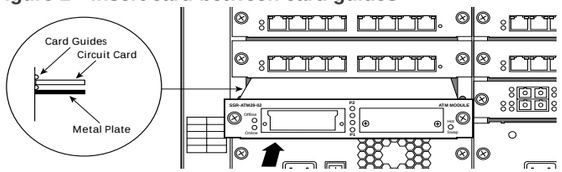
Instructions

CAUTION: Before performing any upgrade or installation, ensure that you are properly "grounded" to avoid electrostatic discharge. However, since you can hotswap the SSR-ATM29-02, the XP 8000/ 8600 may continue running.

1. **Remove the coverplate**. If a coverplate is installed over the expansion slot, remove the coverplate.
2. **Slide the SSR-ATM29-02 into the expansion slot**. Slide the module all the way into the slot, firmly but gently pressing to ensure that the pins on the back of the module are completely seated in the backplane.

NOTE: Make sure the circuit card (and not the metal plate) is between the card guides. Check both the upper and lower tracks.

Figure 1 Insert card between card guides



3. **Tighten captive screws**. Align the captive screws with the holes in the face of the module and tighten the screws to secure the SSR-ATM29-02 to the chassis.

TROUBLESHOOTING

Proper Boot sequence

- The control module on the chassis should indicate that the board was detected and is operating correctly.

Common Errors

- Make sure the chassis is connected to a terminal through a console port.

ADDITIONAL INFORMATION

For additional information about installing this module or to learn more about what capabilities are included in the firmware release you are using, visit the Enterasys Networks web site.

Getting Help

For additional support related to the Common CLI syntax or this document, contact Enterasys Networks using one of the following methods:

World Wide Web	http://www.enterasys.com/
Phone	(603) 332-9400
Internet mail	support@enterasys.com
FTP **Login** **Password**	ftp://ftp.enterasys.com anonymous your email address
To acquire the latest image for this product and any available release notes	http://www.enterasys.com/download
Additional documentation	http://www.enterasys.com/support/manuals

To send comments or suggestions concerning this document, contact the Technical Writing Department via the following email address:
TechWriting@enterasys.com
Please include the document Part Number in the email message.

Before contacting Enterasys Networks for technical support, have the following information ready:

- Your Enterasys Networks service contract number
- A description of the failure
- A description of any action(s) taken to resolve the problem (e.g., changing mode switches, rebooting the unit)
- The serial and revision numbers of all involved Enterasys Networks products in the network
- A description of your network environment (layout, cable type, etc.)
- Network load and frame size at the time of trouble (if known)

SSR-ATM29-02

Quick Start

Web Site: http://www.enterasys.com/

9033687-01

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